

ABSTRACT

Provided are a broadband light source suitable for a pump light module for Raman amplification and a Raman amplifier which uses such light source.

The broadband light source comprises a light source system for emitting light

5 having two or more different output peak wavelengths and a nonlinear medium having an input port and an output port, and the nonlinear medium

affords nonlinear effect on light emitted from the light source system and

input from the input port, and outputs the resultant light as pump light from

the output port. The Raman amplifier, which comprises an optical fiber for

10 Raman amplification, a multiplexing module, and the broadband light source

of the present invention, amplifies signal light propagating through the optical

fiber for Raman amplification.